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JCT 21 1938  
BUREAU OF  
ENTOMOLOGY & PLANT  
September 1938United States Department of Agriculture  
Bureau of Entomology and Plant Quarantine

## A REEL FOR CARRYING ROLLS OF TREE-BANDING MATERIAL

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In many apple-growing districts of the country the spray program against the codling moth (Carpocapsa pomonella (L.)) is sometimes supplemented by the use of chemically treated corrugated paper bands placed about the tree trunks to capture and kill the larvae leaving the fruit. This banding material, as usually prepared commercially, is 2 inches wide, put up in 200-foot rolls, 2 feet in diameter. These rolls can be conveniently carried and unwound on the tree trunks by means of the device shown in figures 1 and 2 and diagrammed in figure 3.

The reel can, of course, be employed with other kinds of banding materials, such as untreated corrugated paper rolls and water-proofed paper-burlap bands.

Two or more rolls can be carried on the reel, the top roll being used first. If the load of rolls is too heavy for one man to carry conveniently, a rod or stick can be inserted through the handle "T" to enable two men to carry it.

A nail inserted in the outer edge of the roll, after unwinding at each tree, will prevent the unwinding of more of the material than is desired.

If the roll is placed on the reel so as to unwind in the same direction each time, it will prove much more convenient and will enable the operators to reduce their movements to a minimum, thereby greatly facilitating the work.

The cost of construction of this reel, aside from labor, would not exceed 40 or 50 cents for handle and shaft parts; the other materials are usually available without cost.

Wire is used to hold the legs together and is placed half way between the top of the leg and the notch so that it can be tightened by twisting. A washer should be placed between the base and the revolving cross arms. Standard galvanized pipe fittings are used in the handle and shaft assembly.

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<sup>1</sup> The reel was designed and built by Richard C. Cummer, unskilled laborer, in 1937; the drawings were made by the junior author, assistant field aid, in 1938, at the Yakima, Wash., laboratory.



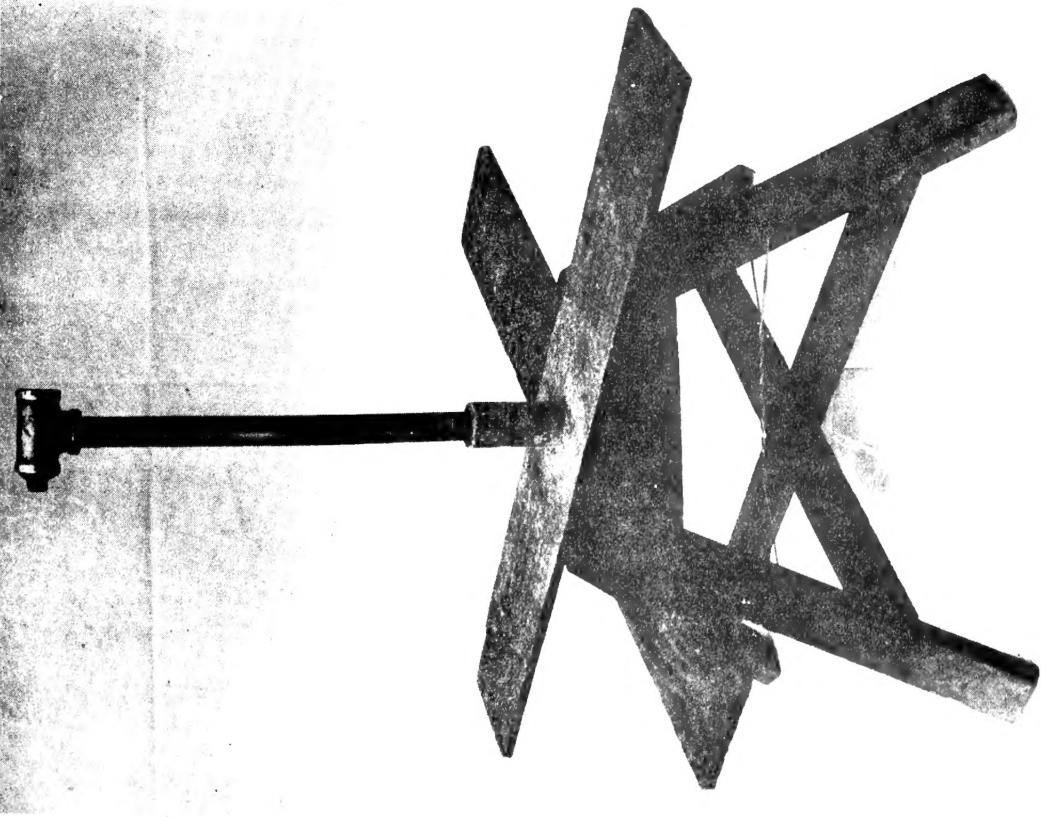


Figure 1. Tree-banding reel.

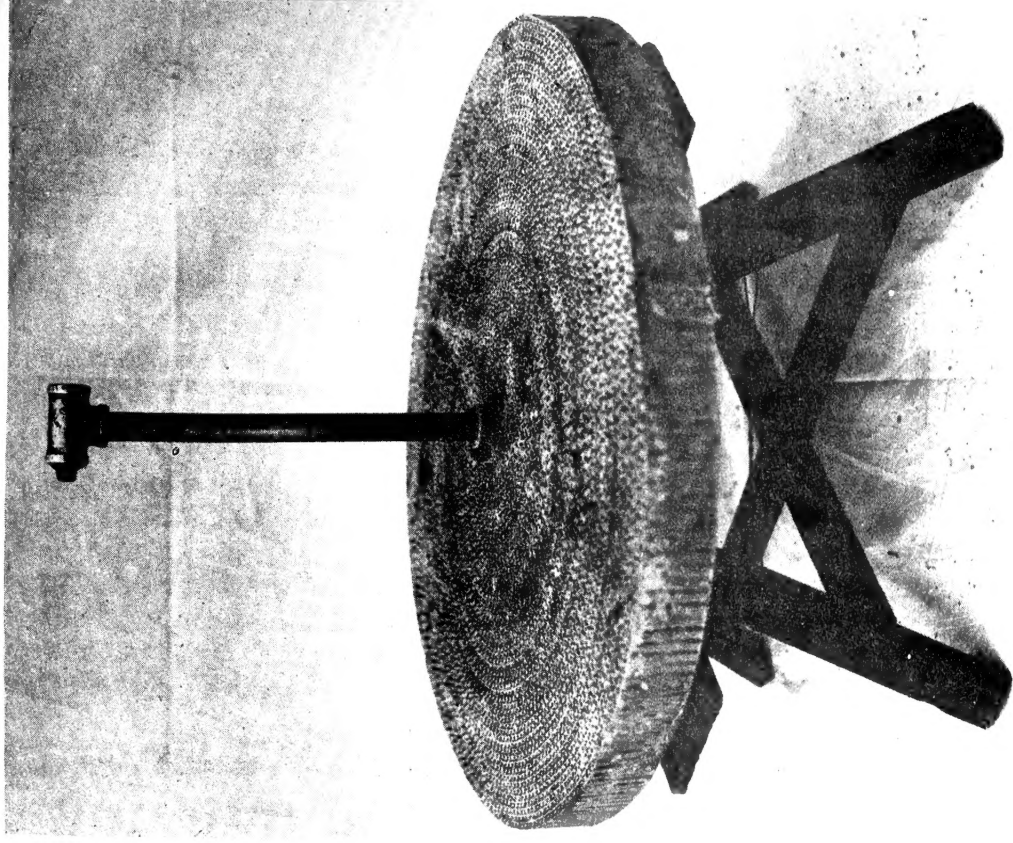


Figure 2. Reel with roll of chemically treated banding material in place.



# TREE BANDING REEL

FOR 200ft. ROLL

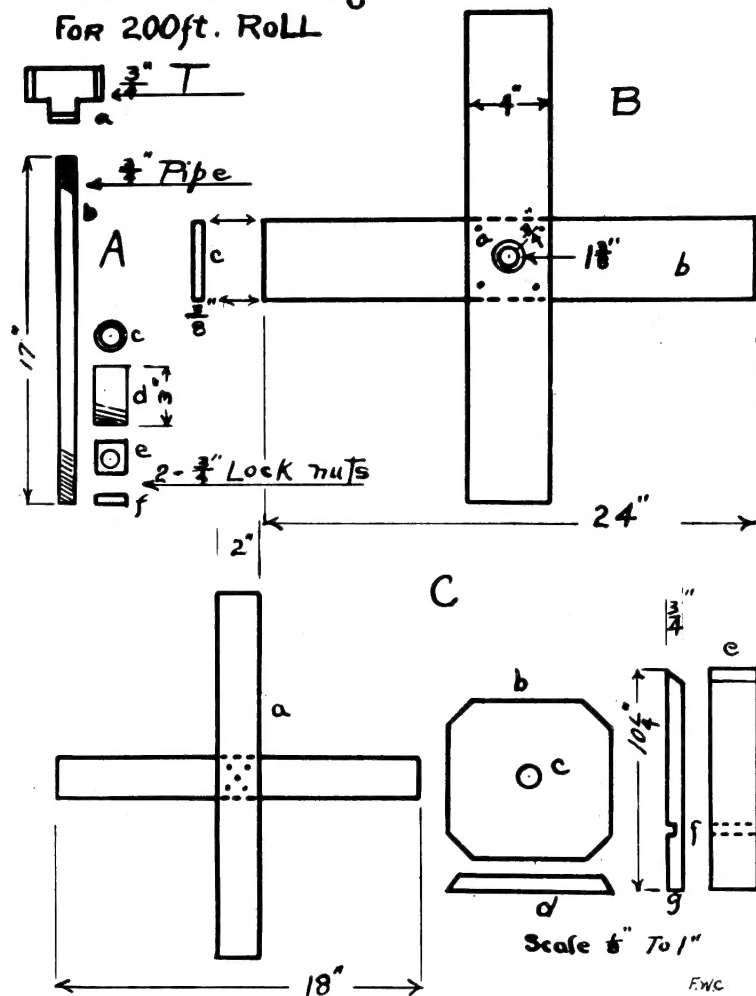


Figure 3.— Details of tree-banding reel.

- A, Shaft and handle assembly: a,  $\frac{3}{4}$ -inch pipe T for handle; b, stationary pipe shaft attached to base (b) in C; c, cross section of sleeve; d, 1-inch pipe for sleeve attached at (a) in B; e, lock nuts ( $2\frac{3}{4}$  inches) to hold shaft (b) of A rigid in base (b) of C; f, side view of (e).
- B, Revolving roll support: a, sleeve screwed into cross arms; b, cross arms; c, cross section of (b).
- C, Stand assembly: a, stand leg braces; b, base of stand; c, hole for stand pipe; d, cross section of base showing bevel for leg spread; e, leg; f, notch ( $\frac{3}{8}$  by  $\frac{3}{8}$  inch) to insert ends of (a); g, edge of leg showing top bevel and notch.

